

Introduction

Riparian Area: *An area of land and vegetation adjacent to a stream that has a direct effect on the stream. This includes woodlands, vegetation, and floodplains.*

Purpose of This Guide








This field guide provides brief, simple, and easy identification of common aquatic and riparian plants, shrubs, and trees of New Hampshire. Although information in this guide is drawn from several sources, it is not intended to be a comprehensive listing of all the aquatic and riparian plant species in New Hampshire. Hopefully, it will provide the casual observer with aid in identification of the most frequently encountered species and references to assist in further, more detailed studies for those wishing to know more about riparian ecosystems. Use of additional field guides to supplement this one and to identify plants not included in this guide is suggested. Other helpful field guides can be found in Appendix A.

How to Identify Plants

There are several ways to identify plants. In field guides, they are typically identified by photos, drawings, and descriptions. In the field, they can also be identified by touch, taste, smell, color, and form. Their branching habit, leaf form, and vein pattern can also aid in identification. Plants can also exhibit different characteristics during different times of the year. In addition, it is useful to know their habitat, or place where they grow.

Organization of This Guide

This field guide is organized into six sections:

-  **In the Water: Submerged Aquatic Plants:** Plants that have most of their leaves growing under water; some floating leaves may also be present. They are found from shallow to deep zones.
-  **On the Water: Floating Plants:** Plants that are rooted with floating broad leaves.
-  **On the Edge: Emergent Herbaceous Plants:** Plants that have leaves that extend above the water's surface and are usually found in shallow water.
-  **Ferns:** Non-flowering plants that bear spores rather than seeds with flattened leaf-like "fronds" that are further divided.
-  **Woody Shrubs:** Woody plants which are generally shorter than trees and smaller in trunk size. They have clusters of stems rising directly from the ground and generally have a "bushy" appearance with no special crown shape.
-  **Climbing Vines:** Plants with a weak stem that derive support from climbing, twining, or creeping along a surface.
-  **The Canopy (Trees):** Woody plants that usually grow from the ground with a single erect stem or trunk. The main stem may be massive and is often unbranched for several feet above the ground. Trees can reach a considerable height at maturity.

A plant species will often have several common names. This field guide is organized alphabetically by the preferred or most-used common name, with the Latin/scientific name below.

Plant species descriptions include the following:

- 🌿 **Status:** Whether the plant is native or non-native/exotic/invasive. Those plants that are non-native/exotic/invasive which are also prohibited in New Hampshire are identified as such.
- 🌿 **Habitat:** Describes the best conditions for growth of this plant and where to locate it.
- 🌿 **Height:** Describes how tall or long the plant grows.
- 🌿 **Bark:** In the Woody Shrub and Tree sections, describes the unique features of the bark.
- 🌿 **Buds:** In the Woody Shrub and Tree sections, describes the unique features of the buds.
- 🌿 **Stem:** In the Woody Shrub section, describes the unique features of the stem.
- 🌿 **Leaves:** Describes the unique features of the leaves.
- 🌿 **Flowers:** Describes the unique features of the flowers.
- 🌿 **Flowering Period:** Describes the time of year in which the flowers bloom.
- 🌿 **Fruit:** Describes the unique features of the fruit.
- 🌿 **Twigs:** In the Woody Shrub and Tree sections, describes the unique features of the twigs.
- 🌿 **Value:** Explains the worth of the plant to the other members of the ecosystem.
- 🌿 **Similar Species:** Describes the unique features to help distinguish this plant from others. Additional information about some of the related plants is also provided.

In addition, appendices to this field guide include:

- 🌿 Appendix A: Other Helpful Field Guides
- 🌿 Appendix B: Glossary of Terms
- 🌿 Appendix C: Leaf Shapes and Arrangements
- 🌿 Appendix D: Native Shoreland/Riparian Buffer Plantings for New Hampshire

For More Information on Exotic Species

Additional information on exotic aquatic plants can be obtained by contacting:

New Hampshire Department of Environmental Services
Exotic Species Program
29 Hazen Drive, PO Box 95
Concord, NH 03302
(603) 271-2248
<http://www.des.nh.gov/WMB/ExoticSpecies/>

While additional information on exotic terrestrial plants can be obtained by contacting:

New Hampshire Department of Agriculture, Markets & Food
Invasive Species Program
25 Capitol Street, Second Floor
Concord, NH 03302
(603) 271-2561
http://nh.gov/agric/divisions/plant_industry/plants_insects.htm

Enjoy a Riparian River-Walk!

I hope this field guide will inspire you to increase your interest and knowledge of aquatic plants and their relationship in riparian environments. Rivers and streams are fragile ecosystems of natural beauty and intrigue. I encourage you to enjoy a riparian “river-walk” during each season and not only study the vegetative communities but their interaction with both terrestrial and aquatic insects, fish, and other wildlife.

Jen Drociak